DATE 06/02/2009

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000027846

APPLICANT VINCE RICHARDSON PHONE 755-5779

ADDRESS 692 SW ARLINGTON BLVD LAKE CITY FL 32025

OWNER WILLIAM & BONNIE ROBBINS PHONE 497-4252

ADDRESS 418 SW HILLTOP TERRACE FT. WHITE FL 32038

CONTRACTOR VINCE RICHARDSON PHONE 497-4252

LOCATION OF PROPERTY 47S, TL HERLONG RD, TR HILLTOP, 4TH LOT ON LEFT

TYPE DEVELOPMENT SCREEN ENCLOSURE ESTIMATED COST OF CONSTRUCTION 5580.00

HEATED FLOOR AREA _____ TOTAL AREA _____ HEIGHT ____ STORIES ____

FOUNDATION _____ WALLS _____ ROOF PITCH _____ FLOOR _____

LAND USE & ZONING A-3 MAX. HEIGHT _____

Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00

NO. EX.D.U. 0 FLOOD ZONE N/A DEVELOPMENT PERMIT NO. _____

PARCEL ID 10-6S-16-03815-153 SUBDIVISION CARDINAL FARMS

LOT 53 BLOCK ____ PHASE ____ UNIT ____ TOTAL ACRES _____

Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor
		110	Vince Richardson

Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident
EXISTING	X09-152	CS	HD	N

COMMENTS: NOC ON FILE

Check # or Cash 2157

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ date/app. by Foundation _____ date/app. by Monolithic _____ date/app. by

Under slab rough-in plumbing _____ date/app. by Slab _____ date/app. by Sheathing/Nailing _____ date/app. by

Framing _____ date/app. by Insulation _____ date/app. by

Rough-in plumbing above slab and below wood floor _____ date/app. by Electrical rough-in _____ date/app. by

Heat & Air Duct _____ date/app. by Peri. beam (Lintel) _____ date/app. by Pool _____ date/app. by

Permanent power _____ date/app. by C.O. Final _____ date/app. by Culvert _____ date/app. by

Pump pole _____ date/app. by Utility Pole _____ date/app. by M/H tie downs, blocking, electricity and plumbing _____ date/app. by

Reconnection _____ date/app. by RV _____ date/app. by Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 30.00 CERTIFICATION FEE $ 0.00 SURCHARGE FEE $ 0.00

MISC. FEES $ 0.00 ZONING CERT. FEE $ ____ FIRE FEE $ 0.00 WASTE FEE $ _____

FLOOD DEVELOPMENT FEE $ ____ FLOOD ZONE FEE $ ____ CULVERT FEE $ ____ **TOTAL FEE** 30.00

INSPECTORS OFFICE _____ CLERKS OFFICE CH

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

For Office Use Only Application # 0905-48 Date Received 5/27 By JW Permit # 27846

Zoning Official Ofs Date 6/2/09 Flood Zone N/A Land Use A-3 Zoning A-3

FEMA Map # / Elevation / MFE / River / Plans Examiner KD Date 6-1-09

Comments

(NOC) ~~EH~~ ~~Deed or PA~~ ✓ Site Plan □ State Road Info □ Parent Parcel #

□ Dev Permit # □ In Floodway □ Letter of Auth. from Contractor □ F W Comp. letter

IMPACT FEES: EMS Fire Corr Road/Code

School = TOTAL Ø

Septic Permit No. 9-09-0152 in file box Fax 386-755-7889

Name Authorized Person Signing Permit Vince Richardson Phone 386-755-5779

Address 692 SW Arlington Blvd. Lake City, Fl 32025

Owners Name William / Bonnie Robbins Phone 386-497-4252

911 Address 418 SW Hilltop Terr. ~~Lake City~~ Ft White, Fla. 32038

Contractors Name Richardson Aluminum, LLC Phone 386-755-5779

Address 692 SW Arlington Blvd. Lake City, Fl 32025

Fee Simple Owner Name & Address

Bonding Co. Name & Address

Architect/Engineer Name & Address Lawrence E. Bennett

Mortgage Lenders Name & Address

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – Progress Energy

Property ID Number 10-6S-16-03815-153 HX Estimated Cost of Construction 5580.00/xx

Subdivision Name Cardinal Farms Lot 53 Block Unit Phase

Driving Directions 47 South, Turn (L) on herlong rd. Turn (R) on Hilltop terr. 2-story on (R) 418 S.W Hilltop Terr

Number of Existing Dwellings on Property 1

Construction of Pool Enclosure Total Acreage 10 Lot Size 500'X872'

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height

Actual Distance of Structure from Property Lines - Front 195 Side 217 Side 255 Rear 465

Number of Stories 1 Heated Floor Area 0 Total Floor Area 616 Roof Pitch Custom

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

left message 6/2/09

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full.
This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE: ***YOU ARE HEREBY NOTIFIED*** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

Vince Richardson
Contractor's Signature (Permitee)

Contractor's License Number _____
Columbia County
Competency Card Number 000110 Alum/Vinyl
000111 Framing

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 27 **day of** May **20** 09

Personally known ✓ **or Produced Identification** _____

Sandra H Tillotson
State of Florida Notary Signature (For the Contractor)

SEAL:

NOTARY PUBLIC STATE OF FLORIDA
SANDRA H. TILLOTSON
MY COMMISSION # DD 629530
EXPIRES: January 31, 2011
Bonded Thru Budget Notary Services

Bennett Engineering Group, Inc.
Lawrence E. Bennett, P.E.
315 Herbert Street
Port Orange, FL 32129
386-767-4774 fax: 386-767-6556

January 1, 2009

TO ALL BUILDING DEPARTMENTS

Re: Master File Engineering
"ALUMINUM STRUCTURES DESIGN MANUAL"
2004 Florida Building Code with 2006 Supplements

Dear Building Official/Plans Examiner:

This is to certify that the following contractor/company is hereby authorized to use my "ALUMINUM STRUCTURES DESIGN MANUAL" during the year 2009.

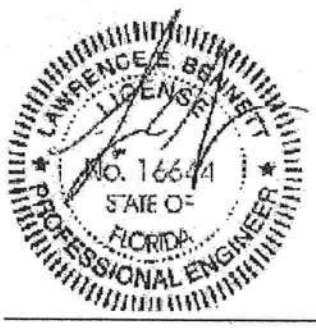
Authorization is on a January to January basis regardless of the edition of the manual. This authorization also applies to contractor master file drawings, "ONE PERMIT ONLY" drawings or any "site specific" drawings that I may furnish the contractor.

The following contractor/company is hereby added to my 2009 MASTERFILE LIST:

Vince Richardson
Richardson Aluminum LLC
692 SW Arlington Blvd
Lake City, FL 32025

Should you have any questions, please contact me at your convenience.

Sincerely,



Lawrence E. Bennett, P.E. #16644

Columbia County Property Appraiser

DB Last Updated: 4/27/2009

2009 Preliminary Values

Tax Record | Property Card | Interactive GIS Map | Print

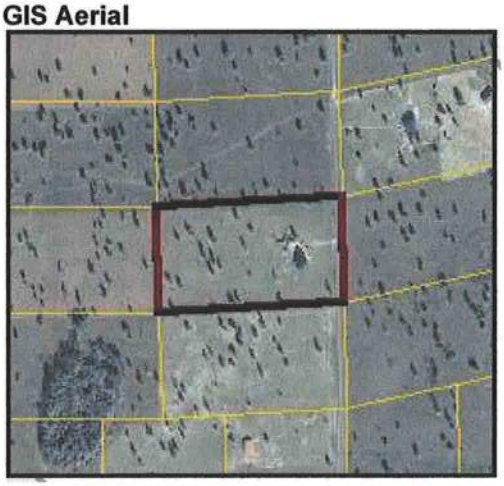
Parcel: 10-6S-16-03815-153 HX

<< Prev Search Result: 2 of 2

Owner & Property Info

Owner's Name	ROBBINS WILLIAM N & BONNIE M		
Site Address	HILLTOP		
Mailing Address	418 SW HILLTOP TERR FT WHITE, FL 32038		
Use Desc. (code)	IMPROVED A (005000)		
Neighborhood	011616.00	**Tax District**	3
UD Codes	MKTA02	**Market Area**	02
Total Land Area	10.010 ACRES		
Description	LOT 53 CARDINAL FARMS UNREC: COMM SE COR OF SEC 11 & RUN W 5311.34 FT, N 1995.16 FT, W 60.18 FT, N 642.99 FT, N 637.72 FT TO POB, RUN W 872.34 FT, N 500.08 FT, E 872.34 FT, S 500.08 FT TO POB. WD 1022-1211.		

GIS Aerial



Property & Assessment Values

Mkt Land Value	cnt: (1)	$6,412.00
Ag Land Value	cnt: (1)	$1,802.00
Building Value	cnt: (1)	$267,034.00
XFOB Value	cnt: (1)	$10,000.00
Total Appraised Value		$285,248.00

Just Value		$363,948.00
Class Value		$285,248.00
Assessed Value		$285,248.00
Exemptions	(code: HX)	$50,000.00
Total Taxable Value		County: $235,248.00 | City: $235,248.00 Other: $235,248.00 | School: $260,248.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
7/29/2004	1022/1211	WD	V	Q		$50,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	SINGLE FAM (000100)	2006	Common BRK (19)	3265	4191	$267,034.00
	Note: All S.F. calculations are based on exterior building dimensions.					

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0030	BARN,MT	2005	$10,000.00	0001000.000	25 x 40 x 0	(000.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000100	SFR (MKT)	0000001.000 AC	1.00/1.00/1.00/1.00	$6,412.50	$6,412.00
006200	PASTURE 3 (AG)	0000009.010 AC	1.00/1.00/1.00/1.00	$200.00	$1,802.00
009910	MKT.VAL.AG (MKT)	0000009.010 AC	1.00/1.00/1.00/1.00	$0.00	$80,502.00

RONNIE BRANNON, CFC — 2007 REAL ESTATE — 011535/0000
COLUMBIA COUNTY TAX COLLECTOR

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

TAX ACCOUNT NUMBER	ESCROW CD	ASSESSED VALUE	EXEMPTIONS	TAXABLE VALUE	MILLAGE CODE
R03815-153		297,336	25,000	272,336	003

R

0002877 02 AV 0.437 **AUTO T3 0 0810 32038-123

ROBBINS WILLIAM N & BONNIE M
418 SW HILLTOP TERR
FT WHITE FL 32038

SEE INSERT FOR IMPORTANT INFO
AND TELEPHONE NUMBERS
WWW.COLUMBIATAXCOLLECTOR.COM

10-6S-16 5000/5000 10.01 acres
LOT 53 CARDINAL FARMS UNREC:
COMM SE COR OF SEC 11 & RUN
W 5311.34 FT, N 1995.16 FT,
W 60.18 FT, N 642.99 FT,
See Tax Roll for extra legal.

AD VALOREM TAXES

TAXING AUTHORITY		MILLAGE RATE	(DOLLARS PER $1,000 OF TAXABLE VALUE)		TAXES LEVIED
C001	BOARD OF COUNTY COMMISSIONERS	7.8530	25,000	272,336	2,138.65
S002	COLUMBIA COUNTY SCHOOL BOARD				
	DISCRETIONARY	.7600	25,000	272,336	206.98
	LOCAL	4.7800	25,000	272,336	1,301.77
	CAPITAL OUTLAY	2.0000	25,000	272,336	544.67
W SR	SUWANNEE RIVER WATER MGT DIST	.4399	25,000	272,336	119.80
HLSH	LAKE SHORE HOSPITAL AUTHORITY	2.0220	25,000	272,336	550.66
IIDA	COLUMBIA COUNTY INDUSTRIAL	.1240	25,000	272,336	33.77

2-7-08
CK 3938
$5191.44

TOTAL MILLAGE 17.9789 — AD VALOREM TAXES $4,896.30

NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	RATE	AMOUNT
FFIR FIRE ASSESSMENTS		146.58
GGAR SOLID WASTE - ANNUAL		201.00

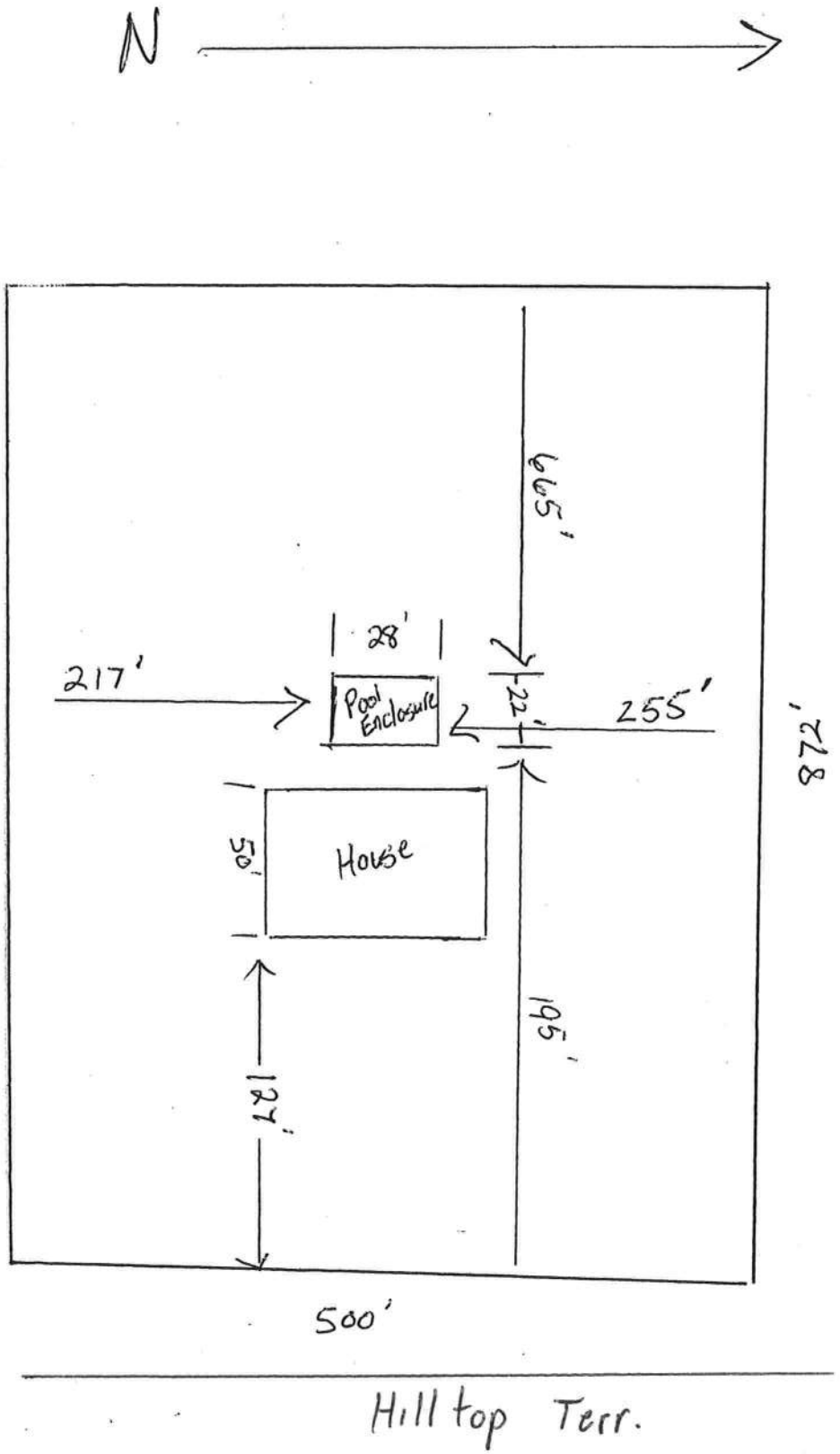
PAY ONLY ONE AMOUNT IN YELLOW SHADED AREA — NON-AD VALOREM ASSESSMENTS $347.58

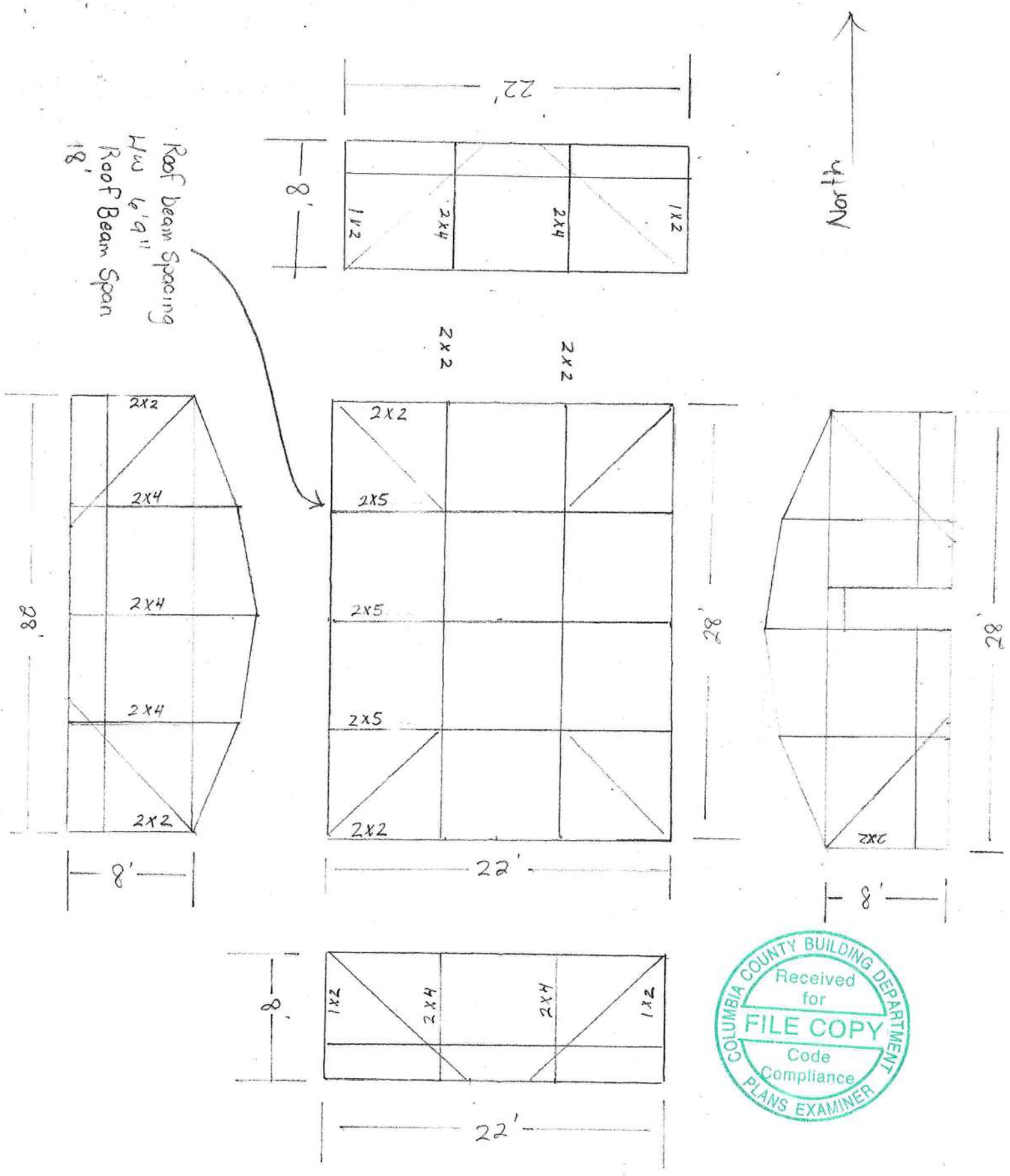
COMBINED TAXES AND ASSESSMENTS	$5,243.88	PAY ONLY ONE AMOUNT	See reverse side for important information.

IF PAID BY	Nov 30	Dec 31	Jan 31	Feb 29	Mar 31
PLEASE PAY	5,034.12	5,086.56	5,139.00	5,191.44	5,243.88

IF PAID BY

Plot Plan


N
165'
28'
217'
Pool Enclosure
22'
255'
872'
50'
House
195'
121'
500'
Hilltop Terr.



SECTION 1
SCREENED ENCLOSURES

General Notes and Specifications:

1. The following structures are designed to be married to site built block or wood frame DCA approved modular structures of adequate structural capacity. The contractor / home owner shall verify that the host structure is in good condition and of sufficient strength to hold the proposed addition.
2. If the owner or contractor has a question about the host structure, the owner (at his own expense) shall hire an architect, engineer, or a certified home inspection company to verify host structure capacity.
3. The structures designed using this section shall be limited to a maximum combined span and upright height of 50' and a maximum upright height of 16'. Structures larger than these limits shall have site specific engineering.
4. Spans are for enclosures with mean roof heights less than 30'. For greater heights, consult engineer.
5. Connections to fascia shall be limited to overhangs shown in table 1.11 or less unless site specific engineering is provided.
6. The proper structural name for a chair rail or top rail of an enclosure is a girt. Thus the terminology shall be interchangeable.
7. Screws that penetrate the water channel of the super gutter shall have ends clipped off for safety of cleaning gutter and the heads of screws through the gutter into the fascia shall be caulked.
8. Section 7 contains span tables and attachment details for pans and composite panels.
9. When using TEK screws in lieu of S.M.S., longer screws must be used to compensate for drill head.
10. An additional super gutter strap or ferrule is required to be located near the midpoint of the beam spacing. Straps shall be attached to each truss / rafter tail when a 2" sub-fascia does not exist. Straps at the beam are not required when straps are placed @ each truss / rafter tail and spacing of straps does not exceed 2'-0".
11. Super or extruded gutter details are applicable to all widths of super or extruded gutters, and gutters may be substituted. Gutter straps and/or ferrules shall be the width of the inside and outside of the super or extruded gutter respectively. The center of the knee braces shall not be more than 6" above the top of the super or extruded gutter.
12. If the sub-fascia is 3/4", and the sub-fascia is in good repair, a 3/4" P.T.P. strip the width of the fascia may be added to the existing sub-fascia by attaching the plywood with (2) 16d x 3" common nails or (2) #8 x 3" screws. This gives the equivalent of a 2" fascia.
13. Spans may be interpolated between values but not extrapolated outside values.
14. All 2" X 4" and larger purlins shall have an internal or external angle clip or screw boss to fasten the bottom of the purlin to the beam.
15. Load width and / or panel spacing used in determining spans / heights is measured from center to center of the members.
    EXAMPLE:
    Screen panel A is 6' center to center. Screen panel B is 7' center to center. The load width of the frame member between panel A and B is (6'/2 + 7'/2) = 6.5' or 6'-6".
    The distance, spacing or load width is not measured between frame members as that would add 2" to the load width if figured that way.
16. For Design Check List and Inspection Guides for Screened Enclosures, see Appendix (Section 10).
17. All aluminum extrusions shall meet the strength requirements of ASTM B221 after powder coating.
18. Other shapes than those shown in Section 8 with State Product Approvals may be used with the details of this section so long as the shapes are compatible with the details.
19. All aluminum shall be ordered as to the alloy and hardness after heat treatment and paint is applied. Example: 6063-T6 after heat treatment and paint process.

Section 1 Design Statement:

The structures designed for Section 1 are framing systems with screen roofs & walls and loads have been determined by wind tunnel test that include any negative internal pressure coefficient. Since these structures are open, the negative internal pressure coefficient is considered to be 0.00. The design loads used are from Chapter 20 of the 2004 Florida Building Code w/ 2006 Supplements. The loads assume a mean roof height of less than 30'; roof slope of 0° to 20°; I = 0.87 for 100 MPH and 0.77 for 110 or higher. All loads are based on 20 / 20 screen or larger. Multiply wall heights by 1.10 for members controlled by bending(b) and 1.07 for members controlled by deflection(d) when using 18 / 14 screen. All pressures shown in the below table are in PSF (#/SF). All framing components are considered to be 6063-T6 alloy. For components of 6005-T5 and 6061-T6 multiply spans by 1.13.

General Notes and Specifications for Section 1 Tables:

SECTION 1 Uniform Loads for Structures with Screen Roof & Walls

Wind Velocity MPH	Basic Wind Pressure	Exposure 'B'			Exposure 'C'		
		Roofs	Windward Walls	Leeward Walls	Roofs	Windward Walls	Leeward Walls
100	13	3	12	10	5	17	13
110	14	4	13	9	5	18	14
120	17	4	15	13	6	21	17
123	18	4.3	15.9	13.3	6.3	22.2	17.6
130	20	5	18	14	7	25	19
1401 & 2	23	6	21	15	8	29	23
150	26	7	24	18	9	33	27

Loads per table 2002.4

Multipliers only apply to members when spans / heights are controlled by wind pressure, not by point load.

Conversion Table 1A
Wind Zone Conversion Factors for Screen Roof or Wall Frame Members
From 120 MPH Wind Zone to Others; Exposure 'B'

Wind Zone MPH	Roofs		Walls	
	Applied Load #/ SF	Conversion Factor	Applied Load #/ SF	Conversion Factor
100	3	1.15	12	1.12
110	4	1.00	13	1.07
120	4	1.00	15	1.00
123	4.3	0.96	15.9	0.97
130	5	0.89	18	0.91
1401 & 2	6	0.82	21	0.85
150	7	0.76	24	0.79

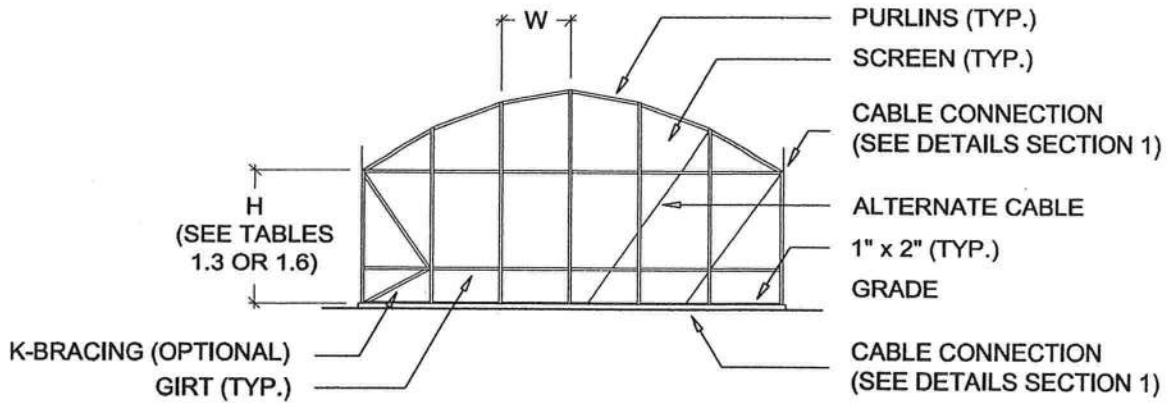
Note:
Multipliers are for wall loads only.
Multipliers only apply to members when spans / heights are controlled by wind pressure, not by point load.

Conversion Table 1B
Load Conversion Factors Based on Mean Roof Height from Exposure "B" to "C" & "D"

Mean Roof Height*	Exposure "B" to "C"			Exposure "B" to "D"		
	Load Conversion Factor	Span Multiplier		Load Conversion Factor	Span Multiplier	
		Bending	Deflection		Bending	Deflection
0 - 15'	1.21	0.91	0.94	1.47	0.83	0.88
15' - 20'	1.29	0.88	0.92	1.54	0.81	0.87
20' - 25'	1.34	0.86	0.91	1.60	0.79	0.86
25' - 30'	1.40	0.85	0.89	1.66	0.78	0.85
30' - 40'	1.37	0.85	0.90	1.61	0.79	0.85

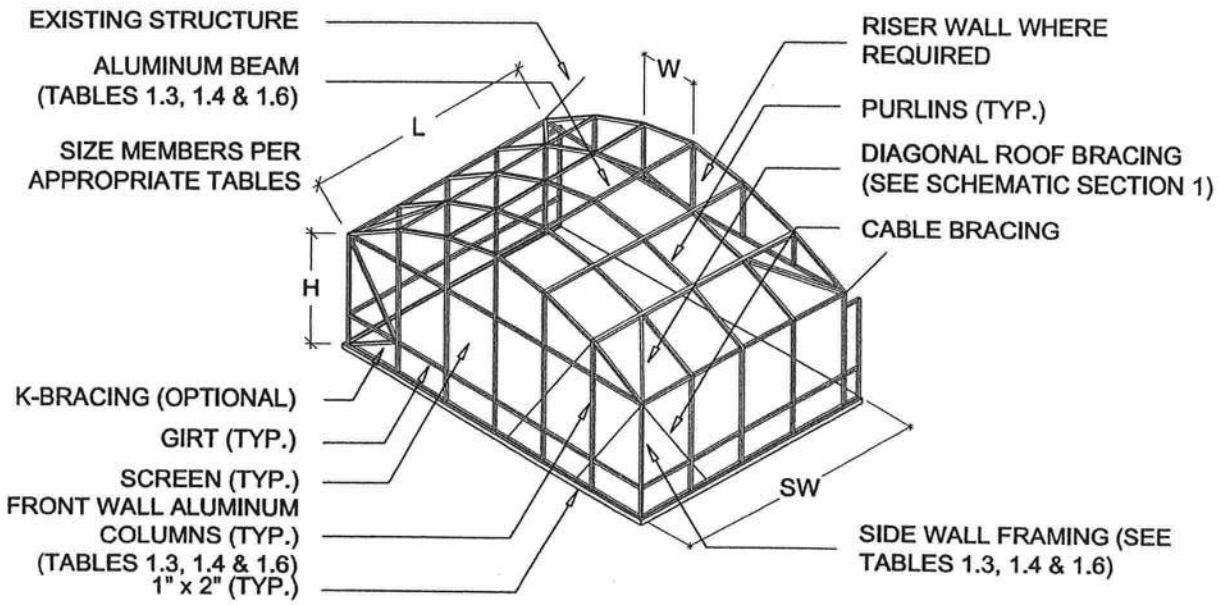
* Use larger mean roof height of host structure or enclosure
Values are from ASCE 7-02
Multipliers only apply to members when spans / heights are controlled by wind pressure, not by point load.

Conversion Example (Convert span for Exposure "B" to "C"):
If max span found from span tables for Exposure "B" = 31'-11" = 31.92'
and the mean roof height of the structure is 0-15' then multiply span by 0.91
the span for Exposure "C" is 31.92' * 0.91 = 29.05' = 29'-1"



TYPICAL DOME ROOF - FRONT WALL ELEVATION

SCALE: N.T.S.

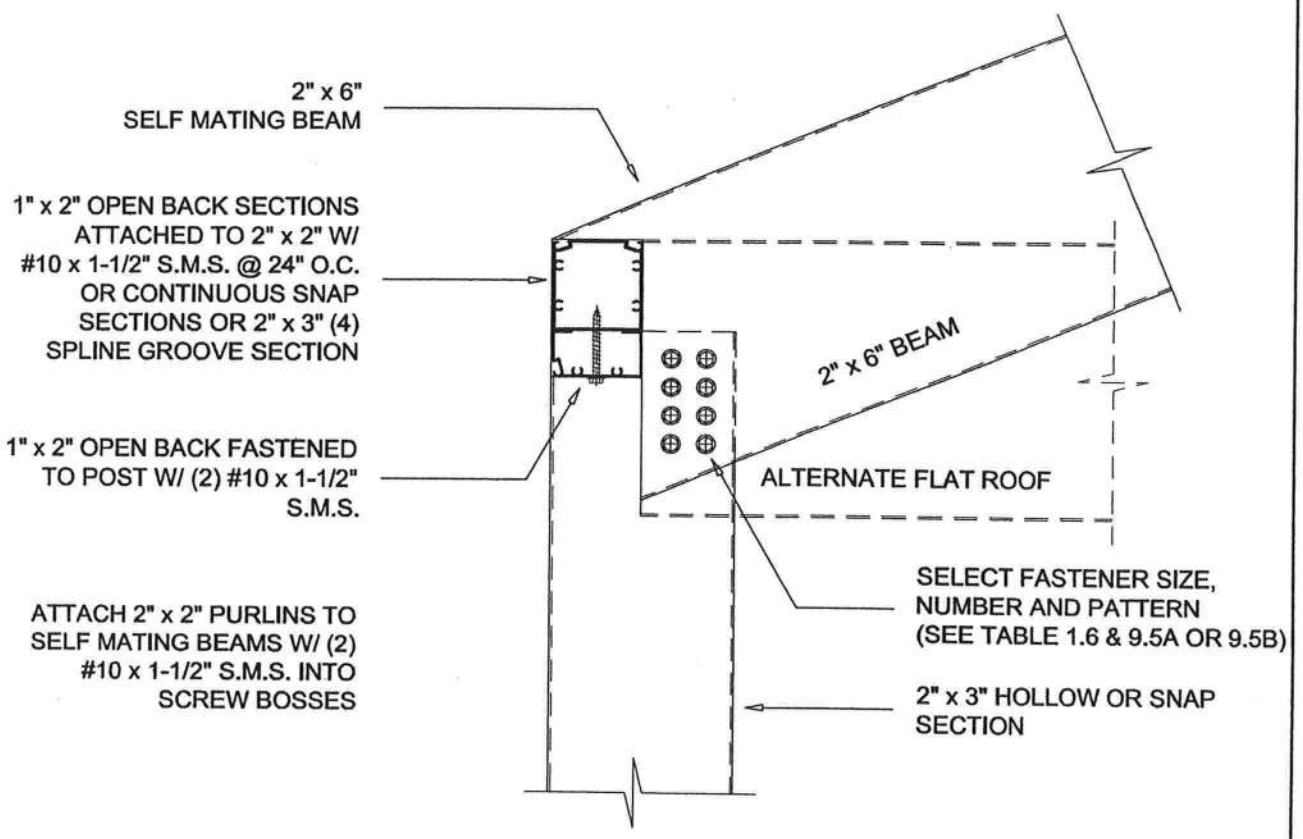


TYPICAL DOME ROOF - ISOMETRIC

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

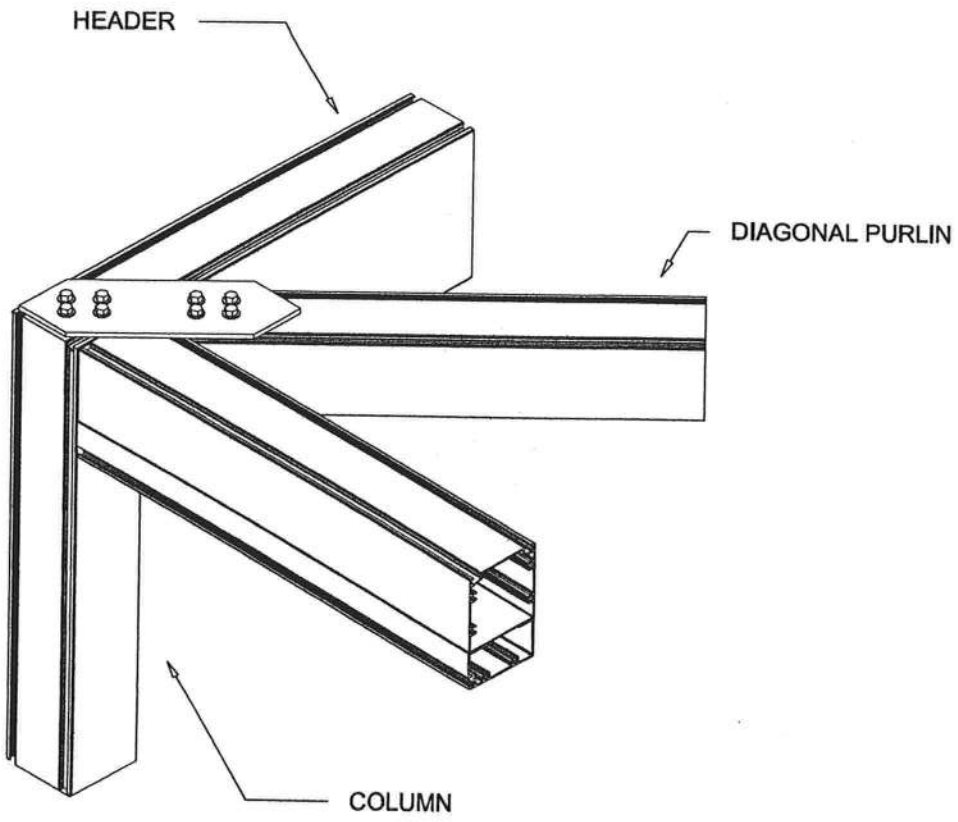
Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214368, South Daytona, Fl 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email: lebpe@bellsouth.net



SLOPING BEAM TO UPRIGHT CONNECTION DETAIL (PARTIAL LAP)

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214368, South Daytona, Fl 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email: lebpe@bellsouth.net



WIND BRACE CONNECTION DETAIL

SCALE: 3" = 1'-0"

NOTES:

1. Wind bracing shall be provided at each side wall panel when enclosure projects more than three panels from host structure. Structures of four or more panels shall be spaced for even number of panels for opposing wind bracing.
2. Cut brace parts with min. 12" lap of larger and smaller brace.
3. Cut receiving channel with angle.

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
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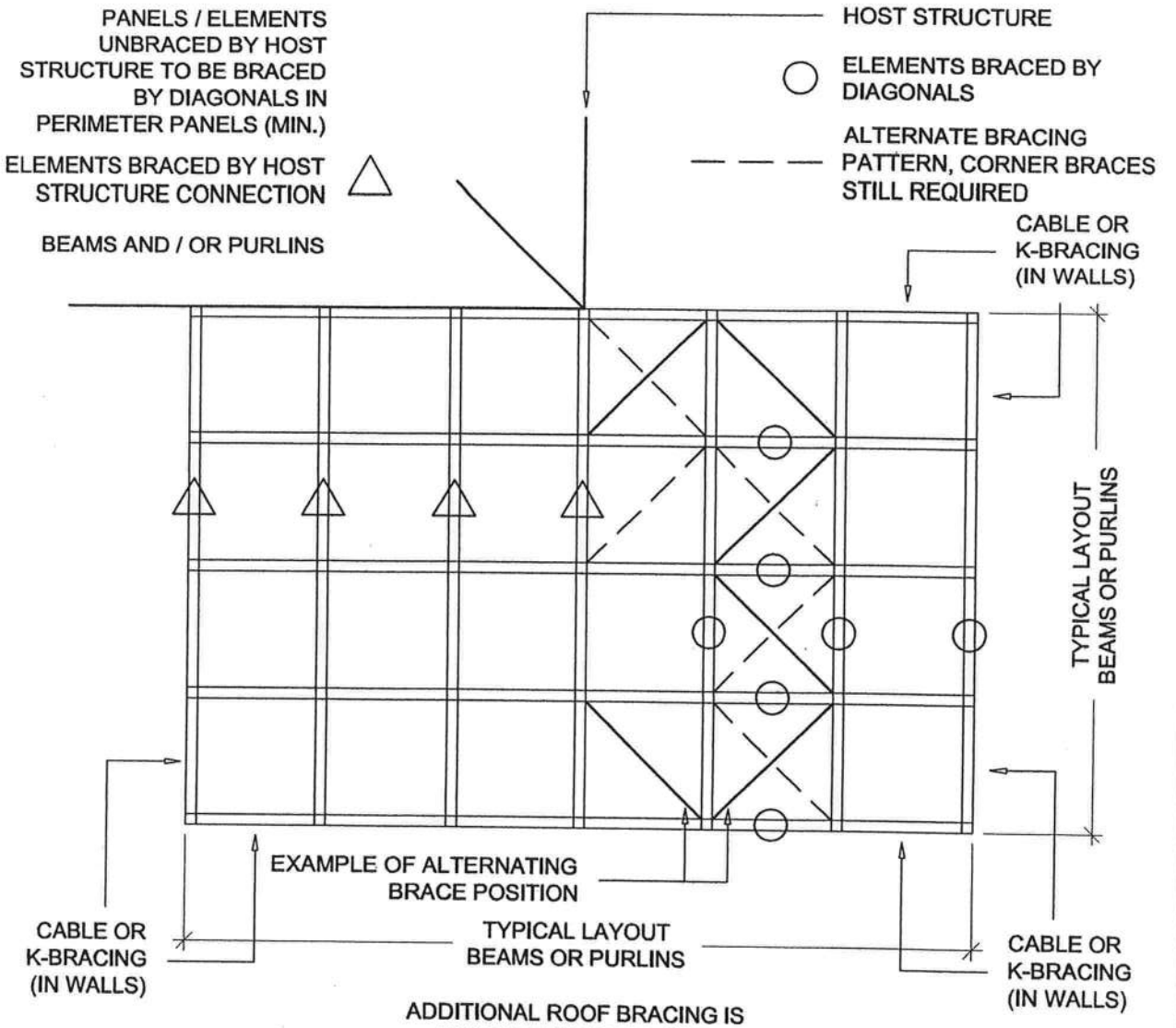

EACH DIAGONAL TO BE FASTENED EACH END W/ (2) EACH #10 S.M.S. (MIN.)

ADDITIONAL ROOF BRACING IS REQUIRED FOR ALL SIDE WALLS LARGER THAN 4 PANELS. NUMBER OF PANELS SHOULD BE EVEN TO PERMIT POSITION OF BRACES ALTERNATING

2 x 2 (MIN) ROOF DIAGONAL, MEET WALL AT WALL BRACING AT CORNERS (TYP.)

(POOL ENCLOSURE SCREEN ROOF MAY BE FLAT, GABLE, MANSARD, DOME, OR HIP)

POOL ENCLOSURE DIAGONAL BRACING - SCHEMATIC PLAN VIEW

SCALE: 3/8" = 1'-0"

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CABLE BRACING

General Notes and Specifications:

1) The following shall apply to the installation of cables as additional bracing to DIAGONAL bracing for pool enclosures:

a) FRONT WALL CABLES - 7 x 19 STAINLESS STEEL

CABLE DIAMETER	TOTAL ALLOWABLE WALL AREA *
3/32"	233 Sq. Ft. / PAIR OF CABLES
1/8"	445 Sq. Ft. / PAIR OF CABLES

* TOTAL WALL AREA = 100% OF FRONT WALL + 50% OF ONE SIDE WALL

EXAMPLE: FRONT WALL AREA @ 100% (8' x 32') = 256 Sq. Ft.
SIDE WALL AREA @ 50% (8' x 20') = 80 Sq. Ft.
TOTAL WALL AREA = 336 Sq. Ft.

233 Sq. Ft. x 2 sets = 466 Sq. Ft. > 336 Sq. Ft.; thus two sets of 3/32" cables is required.

b) SIDE WALL CABLES - 7 x 19 STAINLESS STEEL

CABLE DIAMETER	SIDE WALL CABLE **
3/32"	ONE PER 233 Sq. Ft. OF WALL
1/8"	ONE PER 445 Sq. Ft. OF WALL

** SIDE WALL CABLES ARE NOT REQUIRED FOR SIDE WALLS LESS THAN 233 Sq. Ft.

c) To calculate the required pair of cables for free standing pool enclosures use 100% of each wall area & 50% of the area of one adjacent wall.

NOTES:

1. Where wall height is such that a girt is required between the top or eave rail and the chair rail, (i.e. a mid-rise girt), then the front wall shall have two cable pairs and they shall be attached to the top rail and the mid-rise rail. If more than one additional girt is required between the top or eave rail and the chair rail, then there shall be an additional front wall cable pair at that girt also.

2. Side walls do not require cables until the side wall area is greater than 233 Sq. Ft.. The side wall cable may be attached at the mid-rise girt or the top rail.

3. Standard rounding off rules apply. ie: if the number of cables calculated is less than 2.5 pairs use two cables; if the number of cables calculated is 2.5 pairs or greater use 3 pairs of cables.

4. Additional roof bracing is required for all side walls larger than 4 panels. Number of panels shall be even and position shall be alternating.

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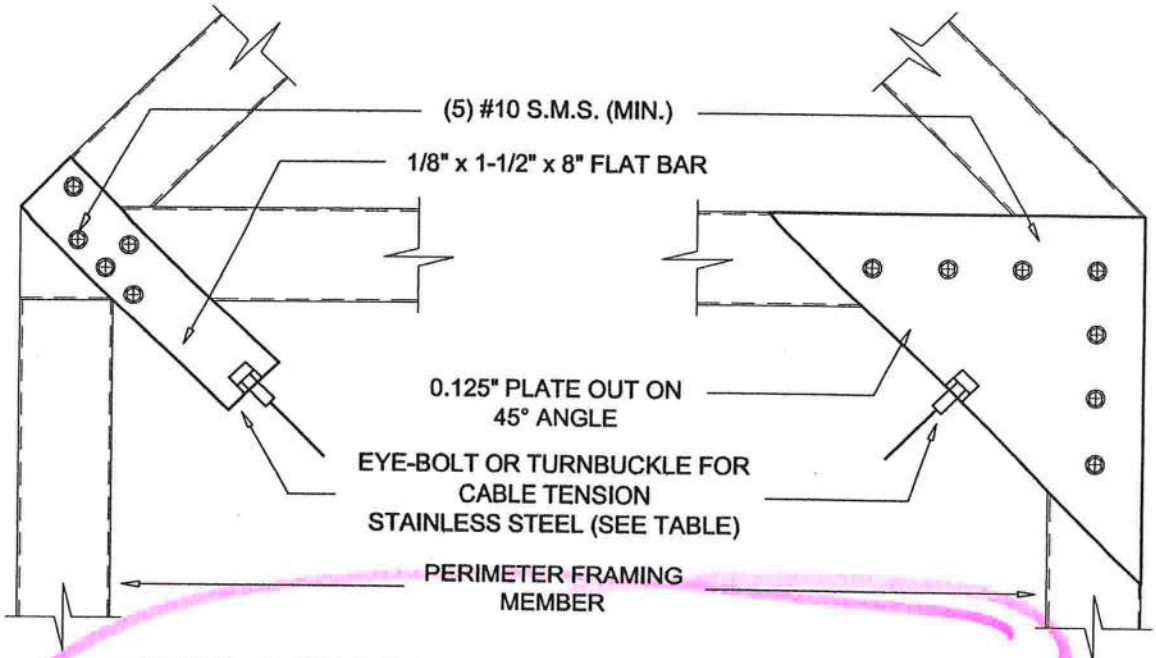
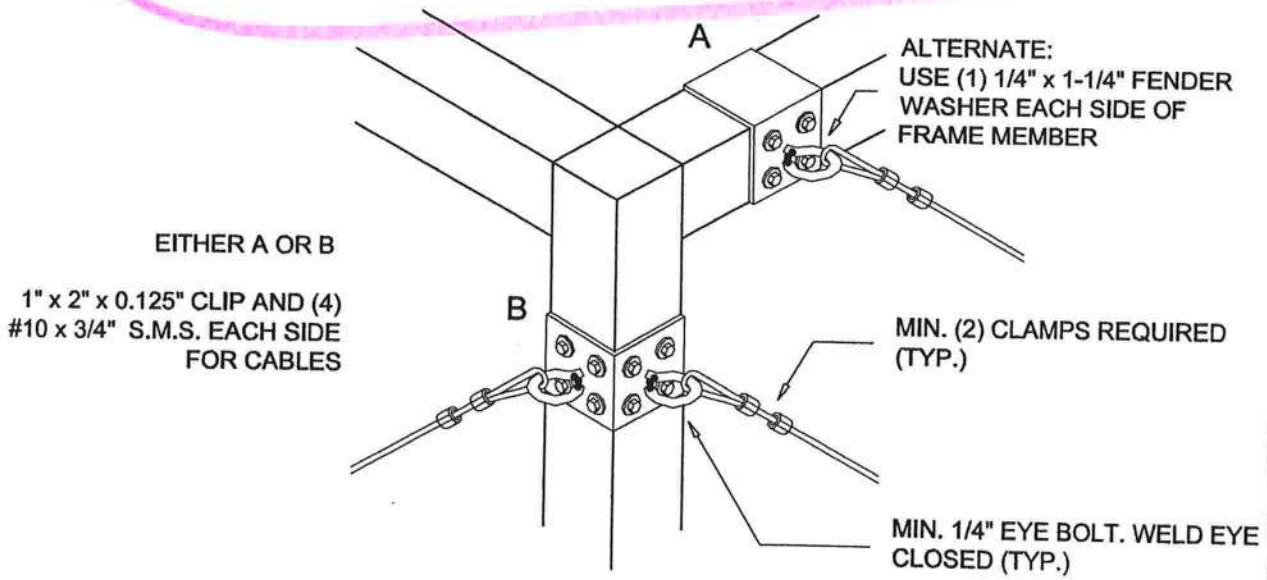


TYPICAL CABLE CONNECTIONS AT CORNER - DETAIL 1

SCALE: 3" = 1'-0"



ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A

SCALE: 3" = 1'-0"

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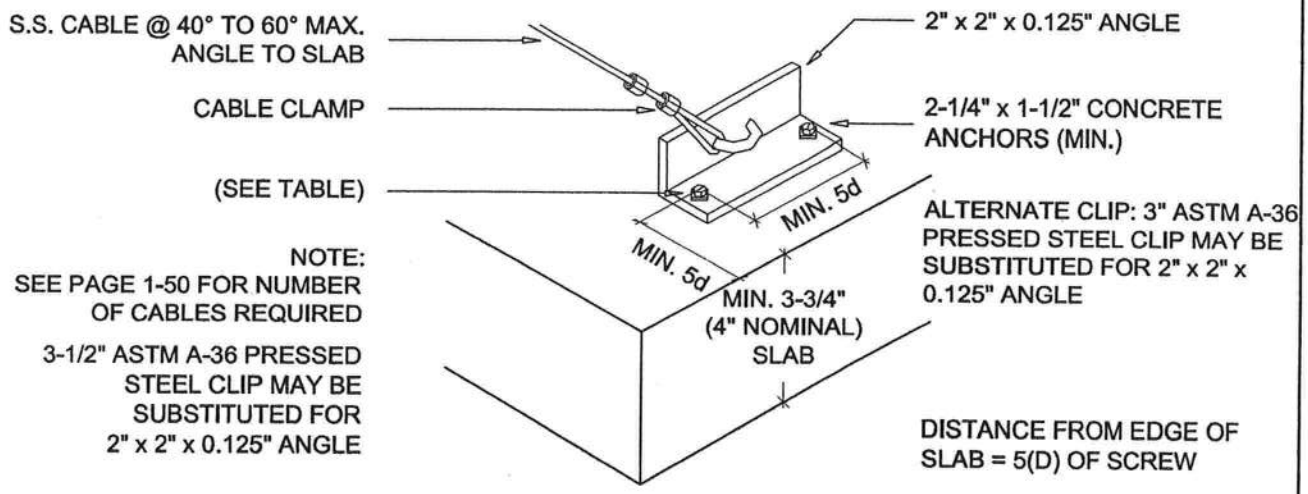
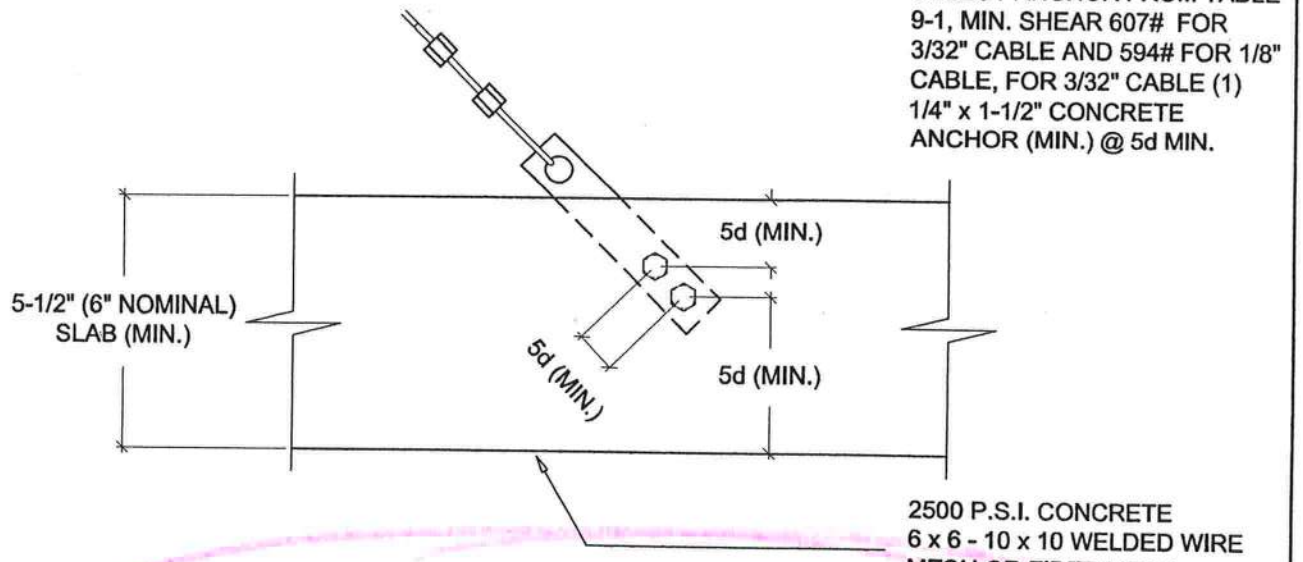


ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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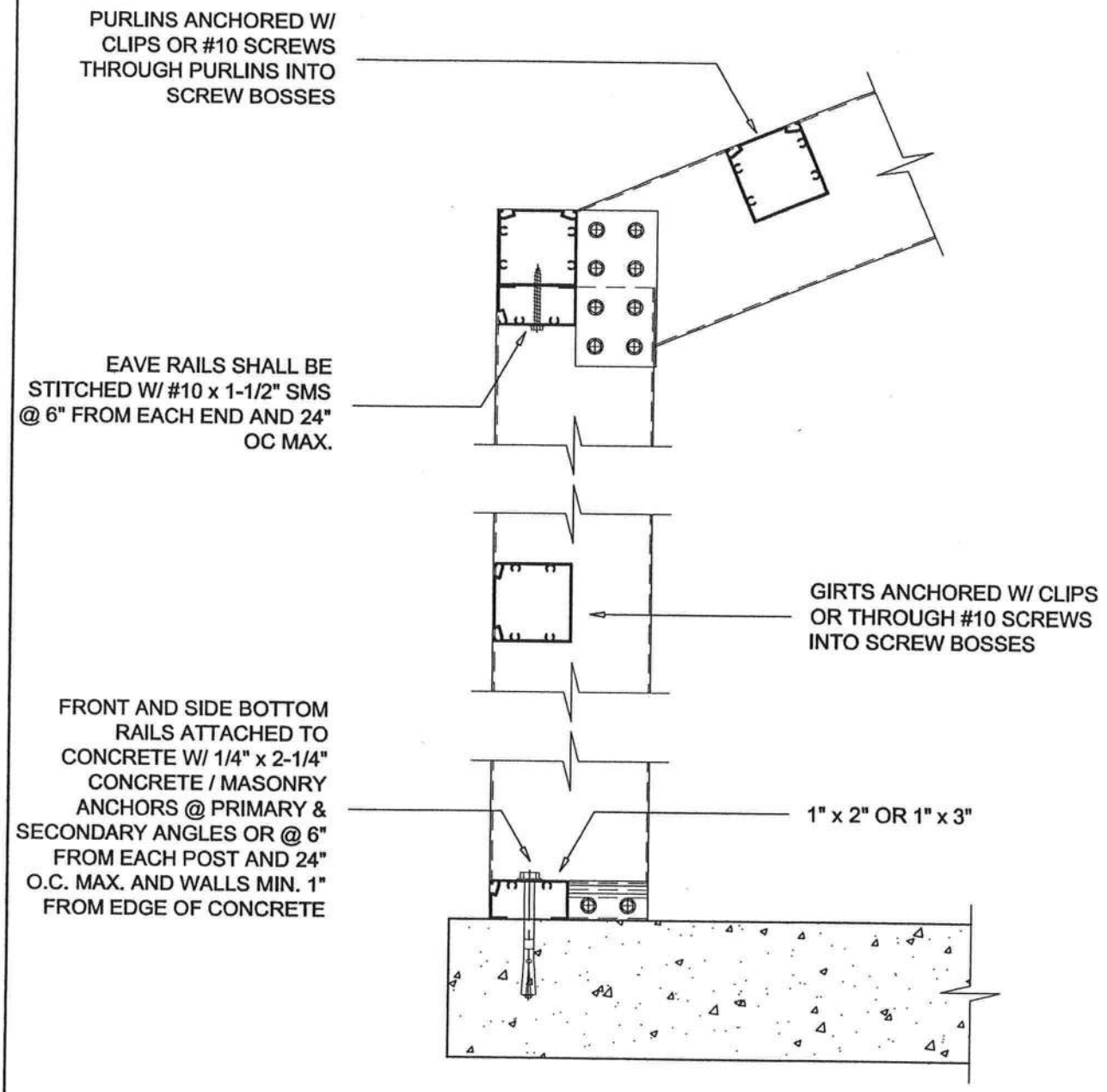

PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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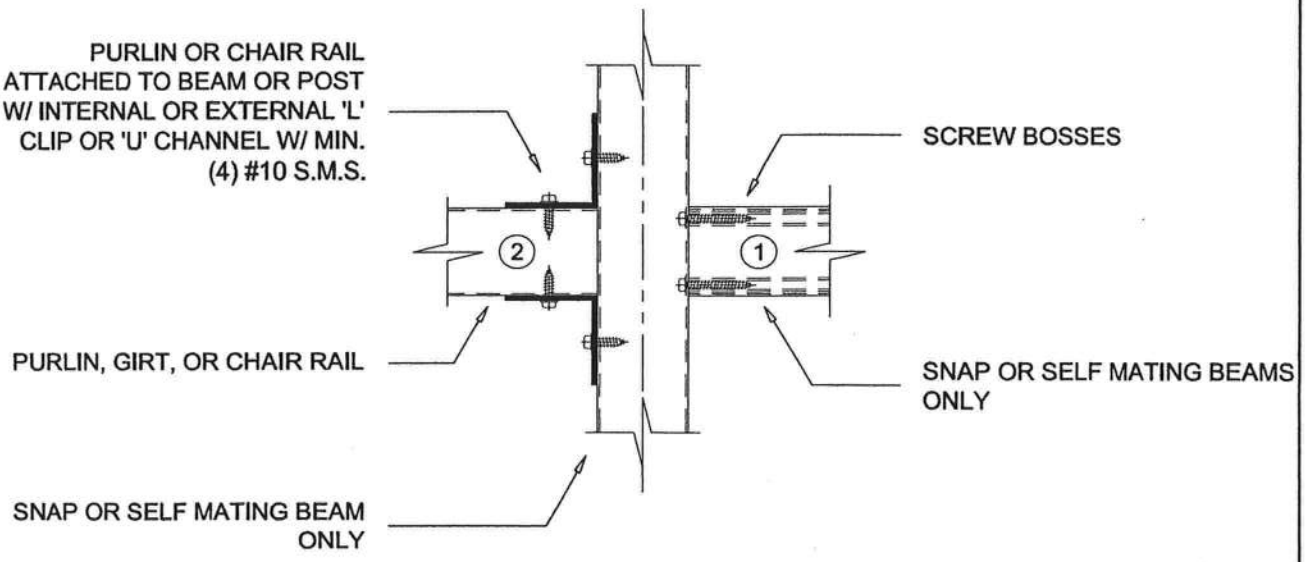

PURLIN TO BEAM OR GIRT TO POST DETAIL

SCALE: 3" = 1'-0"

(1) FOR WALLS LESS THAN 6'-8" FROM TOP OF PLATE TO CENTER OF BEAM CONNECTION OR BOTTOM OF TOP RAIL THE GIRT IS DECORATIVE AND SCREW HEADS MAY BE REMOVED AND INSTALLED IN PILOT HOLES

(2) FOR ALL OTHER PURLINS AND GIRTS IF THE SCREW HEADS ARE REMOVED THEN THE OUTSIDE OF THE CONNECTION MUST BE STRAPPED FROM GIRT TO POST WITH 0.050" x 1-3/4" x 4" STRAP AND (4) #10 x 3/4" S.M.S. SCREWS TO POST AND GIRT

IF GIRT IS ON BOTH SIDES OF THE POST THEN STRAP SHALL BE 6" LONG AND CENTERED ON THE POST AND HAVE A TOTAL (12) #10 x 3/4" S.M.S.

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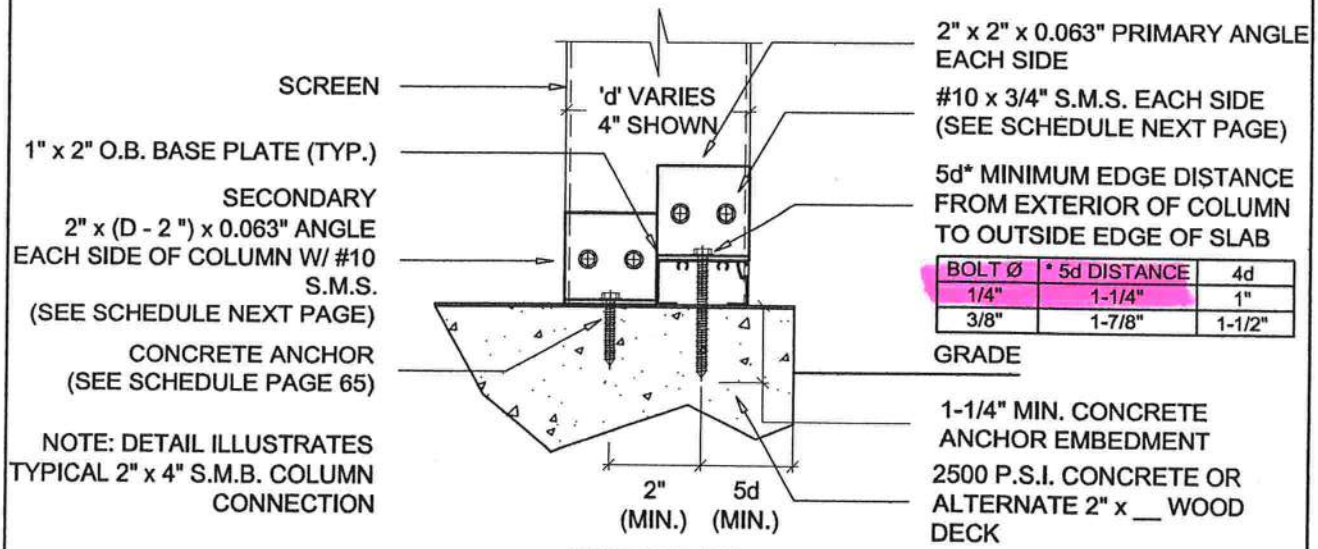
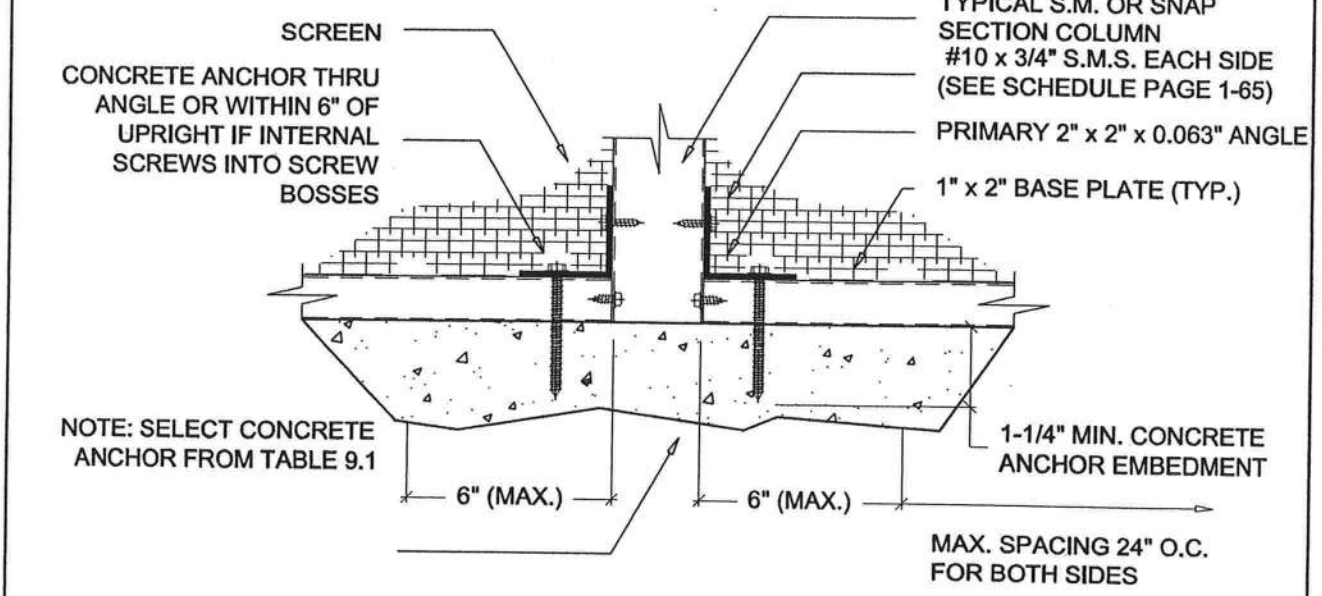


BOLT Ø	* 5d DISTANCE	4d
1/4"	1-1/4"	1"
3/8"	1-7/8"	1-1/2"

SIDE VIEW



FRONT VIEW

2" x 4" OR LARGER SELF MATING OR SNAP SECTION POST TO DECK DETAILS

SCALE: 3" = 1'-0"

NOTE:

1. FOR SIDE WALLS OF 2" x 4" OR SMALLER ONLY ONE ANGLE IS REQUIRED.
2. PREDRILL PAVERS W/ MIN. 1/4" MASONRY BIT.

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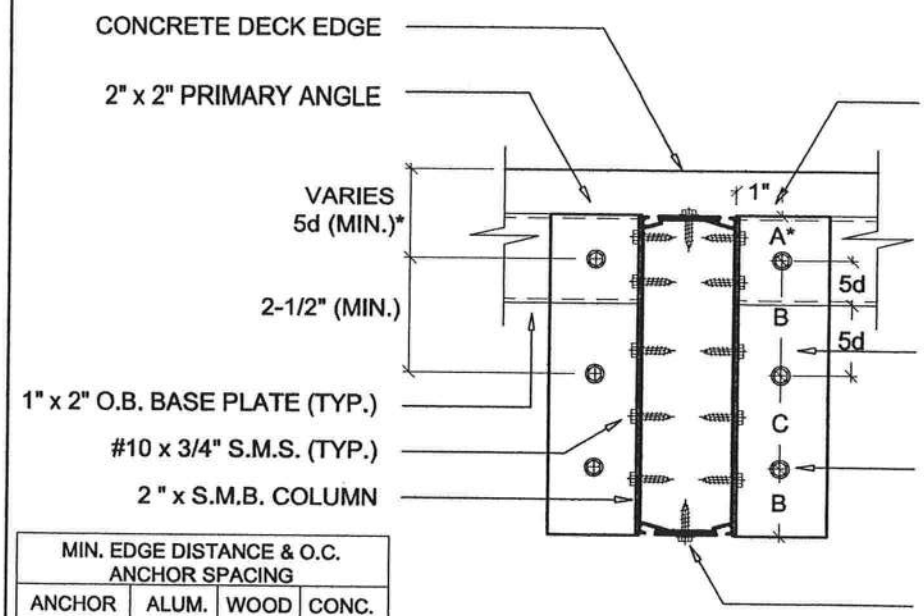
DETAIL ILLUSTRATES TYPICAL 2" x 4" S.M.B. THRU 2" x 9" SUB CONNECTIONS



MIN. EDGE DISTANCE & O.C. ANCHOR SPACING			
ANCHOR	ALUM. 2-1/2d	WOOD 4d	CONC. 5d
1/4"	5/8"	1"	1-1/4"
5/16"	25/32"	1-1/4"	1-9/16"
3/8"	15/16"	1-1/2"	1-7/8"

TOP VIEW POST TO DECK DETAIL

SCALE: 3" = 1'-0"

Primary and Secondary Anchor Schedule

Column Size	Secondary Angle				Maximum Number and Spacing Anchors											
	Angle	Number of Anchors			1/4"				5/16"				3/8"			
	Length "L"	1/4"	5/16"	3/8"	#	"A"	"B"	"C"	#	"A"	"B"	"C"	#	"A"	"B"	"C"
2 x 4	2"	4	4	4	4	1"	1"	1"	4	1"	1"	1"	4	1"	1"	1"
2 x 5	3"	4	4	4	4	1"	1-1/2"	-	4	1"	1-1/2"	-	4	1"	1-1/2"	-
2 x 6	4"	4	4	4	4	1"	2"	-	4	1"	2"	-	4	1"	2"	-
2 x 7	5"	6	4	4	6	1"	5/8"	1-7/8"	4	1"	2-1/2"	-	4	1"	2-1/2"	-
2 x 8	6"	6	4	4	6	1"	5/8"	2-3/8"	4	1"	3"	-	4	1"	3"	-
2 x 9	7"	6	6	4	6	1"	5/8"	2-7/8"	6	1"	13/16"	2-7/8"	4	1"	3-1/2"	-
2 x 10	8"	8	6	6	8	1"	5/8"	2"	6	1"	13/16"	3-3/16"	6	1"	3/4"	3-1/4"

Example:
Calculate the number of anchors required: 1.5 x beam span / 2 x beam spacing x roof wind pressure (PSF) = total #;
If 1.5 x 30'/2 x 6' x 10 PSF = = 1350# and 1/4" x 1/4" Tapcon in tension @ 5d = 427# / ea. (see table 9.1)
then 1350# / 427# / ea. = 3.16 ea. use (3) ea., secondary angle not required

Actual Edge Distance Example:
From edge of concrete to fastener = 2" / dia. of 0.25" = 8d

Note:
For attachment to wood deck substitute wood fasteners for concrete fasteners & calculate the required number of fasteners using tables from section 9.

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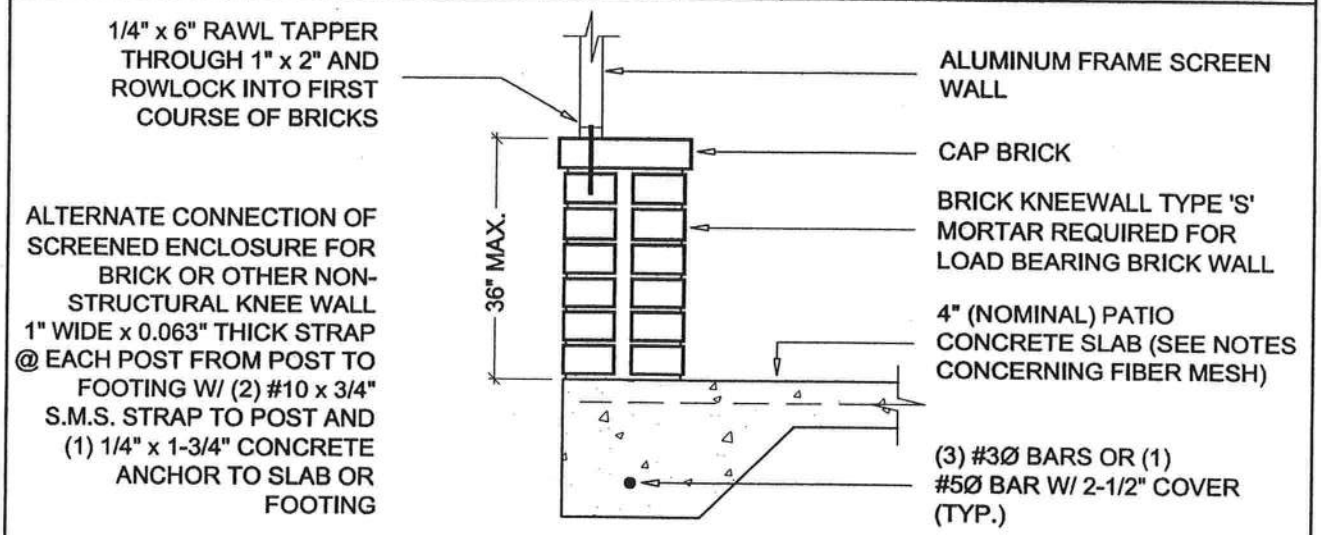
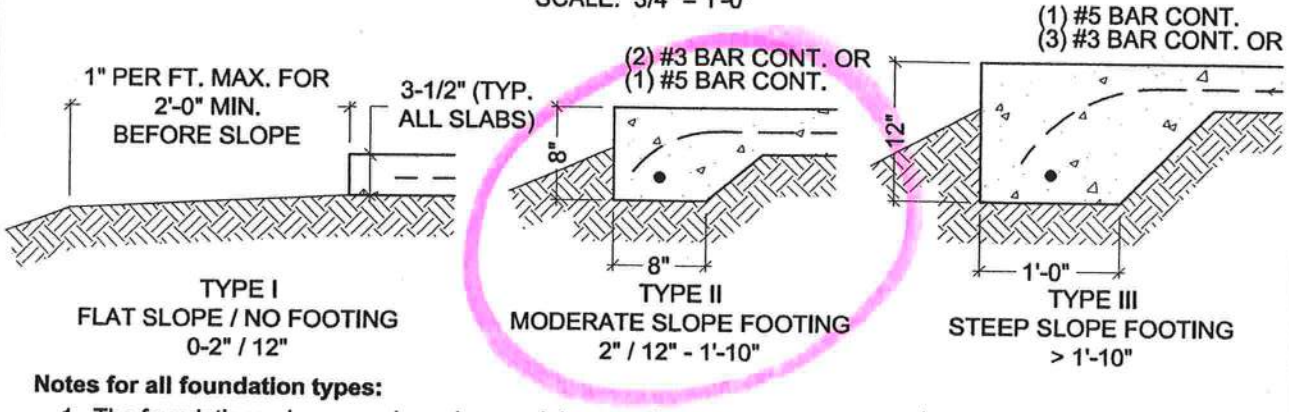


BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS

SCALE: 3/4" = 1'-0"



Notes for all foundation types:

1. The foundations shown are based on a minimum soil bearing pressure of 1,500 PSF. Bearing capacity of soil shall be verified prior to placing slab by field soil test (soil penetrometer) or a soil testing lab.
2. The slab / foundation shall be cleared of debris, roots and compacted prior to placement of concrete.
3. No footing is required except when addressing erosion until the slab width in the direction of the primary beams exceeds the span per table on page 1-69, then a type II slab is required under the load bearing wall only unless the side wall exceeds 16' in height or the enclosure is in a "C" exposure catagory in which case a type II footing is required.
4. Monolithic slabs and footings shall be minimum 2,500 psi concrete with 6 x 6 - 10 x 10 welded wire mesh or crack control fiber mesh; Fibermesh® Mesh, InForce™ e3™ (Formerly Fibermesh MD) per manufacturer's specification may be used in lieu of wire mesh. All slabs / footings shall be allowed to cure for 7 days before installing anchors.
5. If local codes require a minimum footing use Type II footing or footing section required by local code. Local codes govern.

SLAB-FOOTING DETAILS

SCALE: 3/4" = 1'-0"

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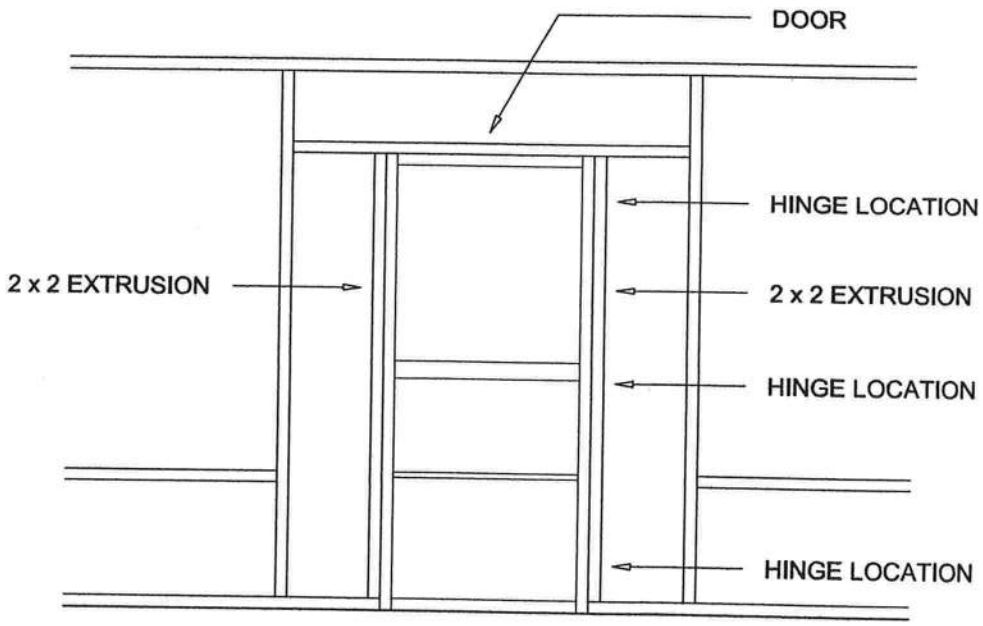

NOTES:

1. Door to be attached to structure with minimum two (2) hinges.
2. Each hinge to be attached to structure with minimum four (4) #12 x 3/4" S.M.S..
3. Each hinge to be attached to door with minimum three (3) #12 x 3/4" S.M.S..
4. Bottom hinge to be mounted between 10 inches and 20 inches from ground.
5. Top hinge to be mounted between 10 inches and 20 inches from top of door.
6. If door location is adjacent to upright a 1" x 2" x 0.044" may be fastened to upright with #12 x 1" S.M.S. at 12" on center and within 3" from end of upright.

TYPICAL SCREEN DOOR CONNECTION DETAIL

SCALE: N.T.S.

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Table 1.1 120 Allowable Spans for Primary Screen Roof Frame Members

Aluminum Alloy 6063 T-6

For Wind Zones up to 120 M.P.H., Exposure "B" and Latitudes Below 30°-30'-00" North (Jacksonville, FL)
Uniform Load = 4 #/SF, a Point Load of 300 #/SF over (1) linear ft. is also considered

Hollow Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044"	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb
2" x 2" x 0.050"	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.090"	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb
2" x 3" x 0.045"	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb
2" x 4" x 0.050"	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb
2" x 5" x 0.062"	20'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-4"	Ud	19'-4"	Ud	18'-6"	Ud	17'-9"	Ud

Self Mating Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 4" x 0.044 x 0.100"	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd
2" x 5" x 0.050" x 0.100"	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	15'-9"	Ud	15'-1"	Ud
2" x 6" x 0.050" x 0.120"	20'-4"	Pd	20'-4"	Pd	20'-4"	Pd	20'-3"	Ud	19'-3"	Ud	18'-5"	Ud	17'-8"	Ud
2" x 7" x 0.055" x 0.120"	24'-9"	Pd	24'-9"	Pd	24'-6"	Ud	23'-1"	Ud	21'-11"	Ud	20'-11"	Ud	20'-2"	Ud
2" x 8" x 0.072" x 0.224"	34'-2"	Pd	32'-9"	Ud	30'-5"	Ud	28'-7"	Ud	27'-2"	Ud	25'-11"	Ud	24'-11"	Ud
2" x 9" x 0.072" x 0.224"	39'-3"	Pd	35'-11"	Ud	33'-4"	Ud	31'-5"	Ud	29'-10"	Ud	28'-6"	Ud	27'-5"	Ud
2" x 9" x 0.082" x 0.310"	42'-5"	Ud	38'-7"	Ud	35'-10"	Ud	33'-8"	Ud	31'-11"	Ud	30'-7"	Ud	29'-5"	Ud
2" x 10" x 0.092" x 0.369"	49'-3"	Ud	44'-9"	Ud	41'-7"	Ud	39'-1"	Ud	37'-2"	Ud	35'-6"	Ud	34'-2"	Ud

Snap Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044"	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd
2" x 3" x 0.045"	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd
2" x 4" x 0.045"	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd
2" x 6" x 0.062"	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd	21'-5"	Ud	20'-5"	Ud	19'-6"	Ud	18'-9"	Ud
2" x 7" x 0.062"	26'-8"	Pd	26'-8"	Pd	25'-9"	Ud	24'-3"	Ud	23'-0"	Ud	22'-0"	Ud	21'-2"	Ud

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. The structures designed using this section shall be limited to a maximum combined span and upright height of 50' and a maximum upright height of 16'. Structures larger than these limits shall have site specific engineering.
3. Span is measured from center of beam and upright connection to fascia or wall connection.
4. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
5. Tables are based on a maximum wall height of 16' including a 4' max. mansard or gable. Other conditions may offer better spans w/ enclosure site specific engineering.
6. Spans may be interpolated.
7. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

Example: Max. 'L' for 2" x 4" x 0.050" hollow section with 'W' = 5'-0" = 9'-1"

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Table 1.3 110 Allowable Post / Upright Heights for Primary Screen Wall Frame Members

Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 #/sq. ft.

Hollow Sections	Tributary Load Width 'W' = Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" / bending (b), deflection (d)													
2" x 2" x 0.044"	7'-5"	d	6'-5"	b	5'-8"	b	5'-1"	b	4'-8"	b	4'-3"	b	3'-11"	b
2" x 2" x 0.050"	7'-10"	d	7'-1"	b	6'-3"	b	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b
2" x 2" x 0.090"	8'-11"	d	8'-2"	d	7'-10"	d	7'-1"	b	6'-7"	b	6'-1"	b	5'-9"	b
2" x 3" x 0.045"	8'-4"	d	7'-7"	d	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b
2" x 4" x 0.050"	11'-2"	b	9'-7"	b	8'-6"	b	7'-9"	b	7'-1"	b	6'-7"	b	6'-1"	b
2" x 5" x 0.062"	17'-3"	b	14'-10"	b	13'-2"	b	11'-11"	b	11'-0"	b	10'-3"	b	9'-7"	b

Self Mating Sections	Tributary Load Width 'W' = Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" / bending (b), deflection (d)													
2" x 4" x 0.044 x 0.100"	11'-11"	d	10'-10"	d	10'-0"	d	9'-5"	b	8'-8"	b	8'-0"	b	7'-6"	b
2" x 5" x 0.050" x 0.100"	14'-9"	d	13'-5"	d	12'-5"	d	11'-7"	b	10'-8"	b	9'-11"	b	9'-4"	b
2" x 6" x 0.050" x 0.120"	17'-3"	d	15'-8"	d	14'-4"	b	13'-1"	b	12'-0"	b	11'-3"	b	10'-6"	b
2" x 7" x 0.055" x 0.120"	19'-8"	d	17'-6"	b	15'-7"	b	14'-2"	b	13'-1"	b	12'-2"	b	11'-5"	b
2" x 8" x 0.072" x 0.224"	24'-4"	d	22'-1"	d	20'-6"	d	19'-4"	d	18'-4"	d	17'-6"	d	16'-10"	d
2" x 9" x 0.072" x 0.224"	26'-8"	d	24'-3"	d	22'-6"	d	21'-2"	d	20'-1"	d	19'-3"	d	18'-2"	b
2" x 9" x 0.082" x 0.310"	28'-8"	d	26'-0"	d	24'-2"	d	22'-9"	d	21'-7"	d	20'-8"	d	19'-10"	d
2" x 10" x 0.092" x 0.369"	33'-3"	d	30'-3"	d	28'-1"	d	26'-5"	d	25'-1"	d	23'-11"	d	23'-1"	d

Snap Sections	Tributary Load Width 'W'= Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" / bending (b), deflection (d)													
2" x 2" x 0.044"	6'-7"	d	5'-11"	d	5'-7"	d	5'-3"	d	4'-10"	b	4'-5"	b	4'-1"	b
2" x 3" x 0.045"	8'-10"	d	8'-1"	d	7'-6"	d	6'-11"	b	6'-3"	b	5'-9"	b	5'-3"	b
2" x 4" x 0.045"	11'-2"	d	10'-2"	d	9'-2"	b	8'-2"	b	7'-5"	b	6'-9"	b	6'-2"	b
2" x 6" x 0.062"	18'-3"	d	16'-7"	d	15'-5"	d	14'-6"	d	13'-9"	d	13'-2"	d	12'-8"	d
2" x 7" x 0.062"	20'-7"	d	18'-9"	d	17'-5"	d	16'-4"	d	15'-7"	d	14'-10"	d	14'-2"	b

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width 'W' select upright length 'H'.
3. Above heights do not include length of knee brace. Add vertical distance from upright to center of brace to beam connection to the above spans for total beam spans.
4. Site specific engineering required for pool enclosures over 30' in mean roof height.
5. Height is to be measured from center of beam and upright connection to fascia or wall connection.
6. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height are designed to be residential guardrails provided they are attached with min. (3) #10 x 1-1/2" S.M.S. into the screw bosses and do not exceed 8'-0" in span.
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
8. Spans may be interpolated.
9. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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Table 1.4 110 Allowable Post / Girt / Chair Rail Spans, Header Spans & Upright Heights for Secondary Screen Wall Frame Members

Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 # / sq. ft.

A. Sections As Horizontals Fastened To Posts With Clips

Hollow Sections	Tributary Load Width 'W' = Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" or Span "L" / bending (b), deflection (d)													
2" x 2" x 0.044"	7'-5"	d	6'-5"	b	5'-8"	b	5'-1"	b	4'-8"	b	4'-3"	b	3'-11"	b
2" x 2" x 0.050"	7'-10"	d	7'-1"	b	6'-3"	b	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b
2" x 2" x 0.090"	8'-11"	d	8'-2"	d	7'-10"	d	7'-1"	b	6'-7"	b	6'-1"	b	5'-9"	b
3" x 2" x 0.045"	8'-4"	d	7'-4"	b	6'-6"	b	5'-10"	b	5'-4"	b	4'-11"	b	4'-7"	b
3" x 2" x 0.070"	9'-5"	d	8'-6"	d	7'-9"	b	7'-0"	b	6'-5"	b	5'-11"	b	5'-7"	b
2" x 3" x 0.045"	8'-4"	d	7'-7"	d	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b
2" x 4" x 0.050"	11'-2"	b	9'-7"	b	8'-6"	b	7'-9"	b	7'-1"	b	6'-7"	b	6'-1"	b
2" x 5" x 0.062"	17'-3"	b	14'-10"	b	13'-2"	b	11'-11"	b	11'-0"	b	10'-3"	b	9'-7"	b

Snap Sections	Tributary Load Width 'W'= Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" or Span "L" / bending (b), deflection (d)													
2" x 2" x 0.044"	6'-7"	d	5'-11"	d	5'-7"	d	5'-3"	d	4'-10"	b	4'-5"	b	4'-1"	b

B. Sections As Horizontals Fastened To Posts Through Side Into Screw Bosses

Hollow Sections	Tributary Load Width 'W' = Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" or Span "L" / bending (b), deflection (d)													
3" x 2" x 0.045"	9'-7"	b	8'-3"	b	7'-3"	b	6'-6"	b	5'-11"	b	5'-6"	b	5'-1"	b
3" x 2" x 0.070"	11'-5"	b	9'-10"	b	8'-8"	b	7'-10"	b	7'-2"	b	6'-8"	b	6'-3"	b
2" x 3" x 0.045"	11'-2"	d	9'-9"	b	8'-8"	b	7'-10"	b	7'-2"	b	6'-8"	b	6'-2"	b
2" x 4" x 0.050"	12'-6"	b	10'-9"	b	9'-6"	b	8'-7"	b	7'-11"	b	7'-4"	b	6'-10"	b
2" x 5" x 0.062"	19'-3"	b	16'-7"	b	14'-9"	b	13'-5"	b	12'-4"	b	11'-6"	b	10'-9"	b

Snap Sections	Tributary Load Width 'W'= Upright Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
	Allowable Height "H" or Span "L" / bending (b), deflection (d)													
2" x 2" x 0.044"	8'-10"	d	7'-8"	b	6'-9"	b	6'-0"	b	5'-5"	b	4'-11"	b	4'-7"	b

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width 'W' select girt lengths.
3. Site specific engineering required for pool enclosures over 30' in mean roof height.
4. Span/height is to be measured from center of beam and upright connection to fascia or wall connection.
5. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height are designed to be residential gardrails provided they are attached with min. (3) #10 x 1-1/2" s.m.s. into the screw bosses and do not exceed 8'-0" o.c.
6. Girt spacing shall not exceed 6'-8".
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
8. 2" x 4" & 2" x 5" hollow girts shall be connected w/ an internal or external 1-1/2" x 1-1/2" x 0.044" angle.
9. Spans/heights may be interpolated.
10. To convert spans/heights to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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Table 1.6 Minimum Upright Sizes and Number of Screws for Connection of Roof Beams To Wall Uprights or Beam Splicing

Beam/Upright or Post	Upright or Post/Beam	Minimum Purlin, Girt & Knee Brace Size	Notes	Minimum Number of Screws*			Beam Stitching Screw at 24" OC
				#8 x ½"	#10 x ½"	#12 x ½"	
2 x 4 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#10
2 x 5 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#8
2 x 6 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	10	8	6	#10
2 x 7 SMB	2 x 4 SMB or H	2" x 3" x 0.044"	Full Lap	14	12	10	#12
2 x 8 SMB	2 x 5 SMB or H	2" x 3" x 0.044"	Full Lap	16	14	12	#14
2 x 9 SMB	2 x 6 SMB	2" x 3" x 0.045"	Full Lap	18	16	14	#14**
2 x 9 SMB *	2 x 7 SMB	2" x 4" x 0.050"	Full Lap	20	18	16	#14**
2 x 10 SMB	2 x 8 SMB	2" x 5" x 0.050"	Full Lap	20	18	16	#14**

Screw Size	Minimum Distance and Spacing of Screws		Gusset Plate Thickness	
	Edge To Center	Center To Center	Beam Size	Thickness
#8	5/16"	5/8"	2" x 7" x 0.055" x 0.120"	0.063"
#10	3/8"	3/4"	2" x 8" x 0.072" x 0.224"	0.125"
#12	1/2"	1"	2" x 9" x 0.072" x 0.224"	0.125"
#14 or 1/4"	3/4"	1-1/2"	2" x 9" x 0.082" x 0..306"	0.190"
5/16"	7/8"	1-3/4"	2" x 10" x 0.092" x 0.369"	0.250"
3/8"	1"	2"		

* 0.082" wall thickness, 0.310" flange thickness

** (1) Stitching screw at 16" O.C. max.

Connection Example:

2" x 7" beam & 2" x 5" at beam & gusset plate, (14) #8 x 1/2" sms & upright & gusset plate (14) #8 x 1/2" sms ea. side of beam & upright.

Note:

1. Connection of 2" x 6" to 2" x 4" shall use a full lap cut or 1/16" gusset plate.
2. For beam splice connections the number of screws shown is the total for each splice with 1/2 the screws on each side of the cut.
3. The number of screws is based on the maximum allowable moment of the beam.
4. The number of deck anchors is based on RAWL R Tapper allowable load data for 2,500 psi concrete and / or equal anchors may be used. The number shown is the total use 1/2 per side.
5. Hollow splice connections can be made provided the connection is approved by the engineer.
6. If a larger than minimum upright is used the number of screws is the same for each splice with 1/2 the screws on each side of the cut.
7. The side wall upright shall have a minimum beam size as shown above, ie., a 2" x 4" upright shall have a 2" x 3" beam.
8. For minimum girt size read upright size as a beam and purlin size is minimum girt size. (i.e. 2" x 9" x 0.072" x 0.224" s.m.b. w/ 2" x 6" x 0.050 x 0.120" s.m.b. upright requires a 2" x 3" x 0.045" girt / chair rail.)

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Table 1.7 **Minimum Size Screen Enclosure Knee Braces and Anchoring Required**
Aluminum 6063 T-6

Brace Length*	Extrusion	Anchoring System
0' - 2'-0"	2" x 2" x 0.044"	2" H-Channel With (3) #10 x 1/2" each leg of channel
To 3'-0"	2" x 3" x 0.045"	2" H-Channel With (3) #10 x 1/2" each leg of channel
To 6'-0"	2" x 4" x 0.044" x 0.125"	2" H-Channel With (4) #10 x 1/2" each leg of channel

* Knee brace length shall be the horizontal and vertical length @ a 45° angle from the center of the connection to the face of the beam or upright.

Note:

1. For required knee braces greater than 4'-6" contact engineer for specifications and details.
2. Cantilever beam detail shown on page 1-40 shall be used for transom wall to host structure attachment when knee brace length exceeds 6'-0".

Table 1.8 **K-Bracing Fastening Schedule**

	Number of #10 x 3/4" S.M.S. Required				
Maximum Wall Width =	Corner Post @ Top	Diagonals (K) per End	Intermediate Post @ Chair Rail	Corner Post @ Bottom	Plate to Sole Plate
20'-0"	2	2	4	2	2
30'-0"	2	2	4	2	2
40'-0"	3	4	6	2	2
50'-0"	4	5	8	3	3
60'-0"	6	7	12	3	3

Use front wall width when determining number of s.m.s. for the side wall K-bracing.
Use side wall width when determining number of s.m.s. for the front and / or back wall K-bracing.

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Inst:200912009050 Date:6/2/2009 Time:1:13 PM
DC,P.DeWitt Cason,Columbia County Page 1 of 1 B:1174 P:807

NOTICE OF COMMENCEMENT

PERMIT NUMBER: _____

STATE OF: FLORIDA COUNTY OF: Columbia CITY OF: Lake City

THE UNDERSIGNED HEREBY gives notice that improvement(s) will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

DESCRIPTION OF PROPERTY

LOT: 53 BLOCK: _____ SECTION: _____ TOWNSHIP: _____ RANGE: _____

TAX PARCEL NUMBER: 10-6S-16-03815-153 HX

SUBDIVISION: Cardinal Farms PLATBOOK: _____ MAP PAGE: _____

STREET ADDRESS: 418 SW Hilltop Terr.

GENERAL DESCRIPTION OF IMPROVEMENTS

TO CONSTRUCT: Pool Enclosure

OWNER INFORMATION

OWNER NAME: William / Bonnie Robbins

ADDRESS: 418 S.W Hilltop Terr. PHONE NUMBER: 386-497-4252

CITY: ~~Lake City~~ Ft White STATE: Fla. ZIP CODE: 32038

INTEREST IN PROPERTY: _____

FEE SIMPLE TITLEHOLDER NAME: _____

FEE SIMPLE TITLEHOLDER ADDRESS: _____

(if other than owner)

CONTRACTOR NAME: Vince Richardson / Richardson Aluminum LLC.

ADDRESS: 692 SW Arlington Blvd PHONE NUMBER: 386-755-5779

CITY: Lake City STATE: Fla ZIP CODE: 32025

BONDING COMPANY: _____

ADDRESS: _____ PHONE NUMBER: _____

CITY: _____ STATE: _____ ZIP CODE: _____

LENDER NAME: _____

ADDRESS: _____ PHONE NUMBER: _____

CITY: _____ STATE: _____ ZIP CODE: _____

Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a) 7., Florida Statutes:

NAME: _____ ADDRESS: _____

In addition to himself, Owner designates _____

of _____ to receive a copy of Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

Expiration date is one (1) year from date of recording unless a different date is specified.

SIGNATURE OF OWNER: _____

SWORN to and subscribed before me this 27 day of May, A.D. ~~2004~~ 2009

Notary Public: Columbia Sandra H Tillotson

My commission Expires: Jan 31 2011

NOTARY PUBLIC STATE OF FLORIDA

SANDRA H. TILLOTSON
MY COMMISSION # DD 629530
EXPIRES: January 31, 2011
Bonded Thru Budget Notary Services

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 10-6S-16-03815-153 **Building permit No.** 000027846

Use Classification SCREEN ENCLOSURE **Fire:** 0.00

Permit Holder VINCE RICHARDSON **Waste:**

Owner of Building WILLIAM & BONNIE ROBBINS **Total:** 0.00

Location: 418 SW HILLTOP TERR, FT. WHITE, FL

Date: 06/05/2009

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)